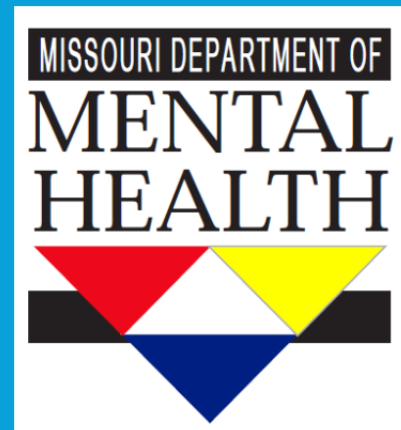




2017

Missouri Intervention and Treatment Programs for Substance Use Disorders



Missouri Department of
Mental Health
January 2017

Missouri Intervention and Treatment Programs for Substance Use Disorders

About the Programs

In Missouri, the Department of Mental Health (DMH) is the state authority responsible for developing and implementing a statewide response addressing substance use disorders impacting Missouri families and communities. DMH provides intervention, treatment, and recovery support services through contracted community-based and faith-based service providers. DMH works closely with the Department of Social Services for the coordination of services for the state's Medicaid population and with the Department of Corrections for the coordination of services for the supervised offender population.

Authorization for Programs

RSMo 631.010 and 191.831 for substance use disorder treatment programs and RSMO 302.010, 302.304, 302.540, 577.001, 577.041, 577.049, and 631.010 for the substance abuse traffic offenders program.

Funding

Substance use disorder treatment programs are funded by about \$40.5 million in state general revenue which generates an additional \$64.4 million in matched federal funding including Medicaid and Substance Abuse Prevention and Treatment Block Grant.

Prevalence of Substance Use in Missouri

- **General Population:** Approximately 419,000 Missourians struggle with a substance use disorder. Of these, 17,000 are between the ages of 12 and 17 (SAMHSA, 2015).
- **Community-Supervised Offender Population:** In Missouri, approximately 13,082 parolees and 28,700 probationers need substance use disorder treatment (Missouri Department of Corrections, 2015).
- **Veterans Population:** Of the approximately 494,300 Missouri Veterans, an estimated 6.2 percent or 30,600 have a substance use disorder (Missouri Department of Public Safety, 2016; SAMHSA, 2015b).
- **Pregnant Women:** Of the approximately 83,600 pregnancies in the state, about 8,400 are women who are struggling with an alcohol or drug problem (Missouri Department of Health & Senior Services, 2014; SAMHSA, 2015b).

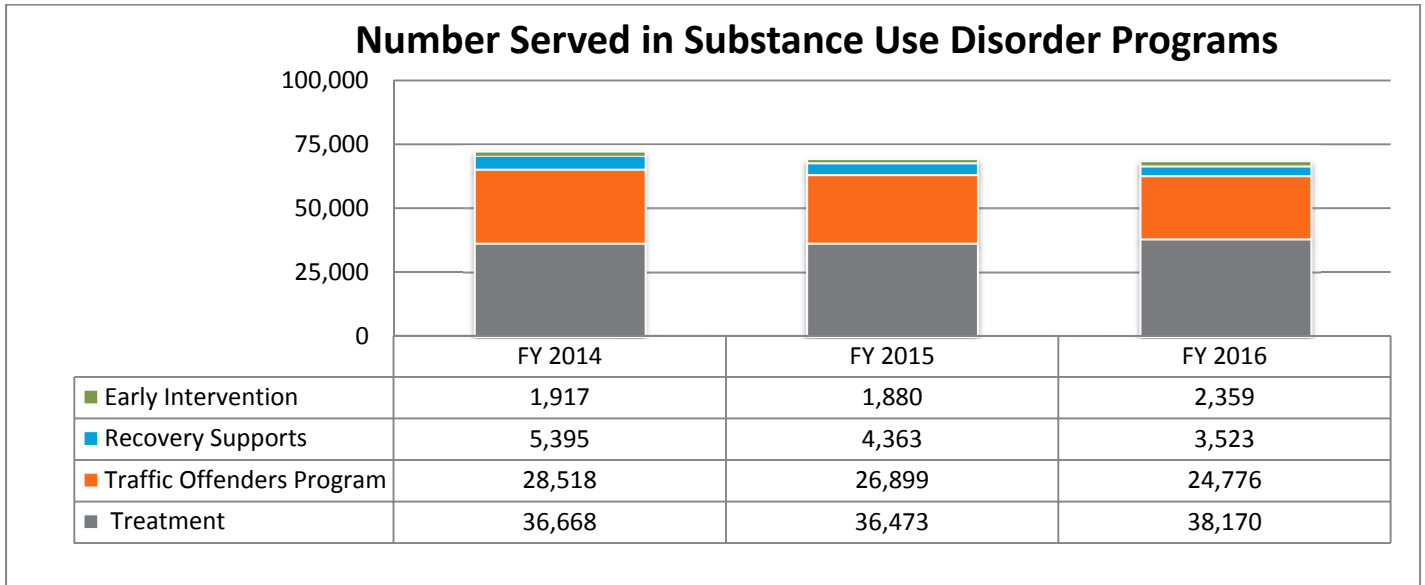
Number Served

Special Populations

Received treatment for a substance use disorder in FY 2016:

- 795 Pregnant women
- 2,975 Adolescents
- 2,234 Veterans
- 19,624 Community-supervised offenders on probation or parole
- 2,228 Homeless Missourians
- 10,470 Parents with dependent children
- 2,859 Drug Court participants
- 17,837 Individuals with a co-occurring mental illness (6,654 with a serious mental illness)
- 17,443 Medicaid enrollees, including 7,808 partially or totally disabled

Missouri Intervention and Treatment Programs for Substance Use Disorders

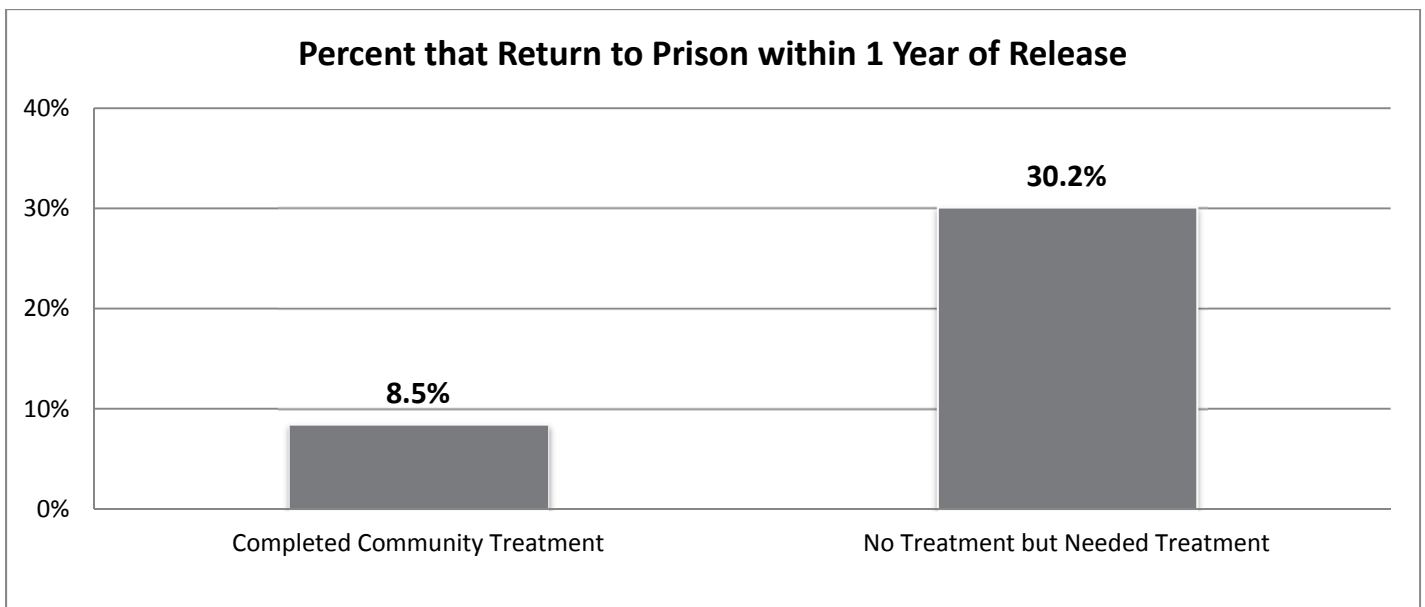


*Recovery Supports are funded through the federal Access to Recovery (ATR) grant. The Substance Abuse Traffic Offenders' (SATOP) Program is largely funded through offender fees. Substance Abuse Treatment is funded through a combination of state and federal funding and includes non-SATOP treatment programs.

Evidence of Effectiveness

Community-Based Treatment Produces less Re-Incarceration

Research has shown that substance use disorder treatment during and after incarceration reduces re-incarceration rates (National Institute on Drug Abuse, 2012). Missouri's data shows that offenders who complete community-based substance use disorder treatment have a lower re-incarceration rate compared to those who did not receive any treatment but needed treatment.

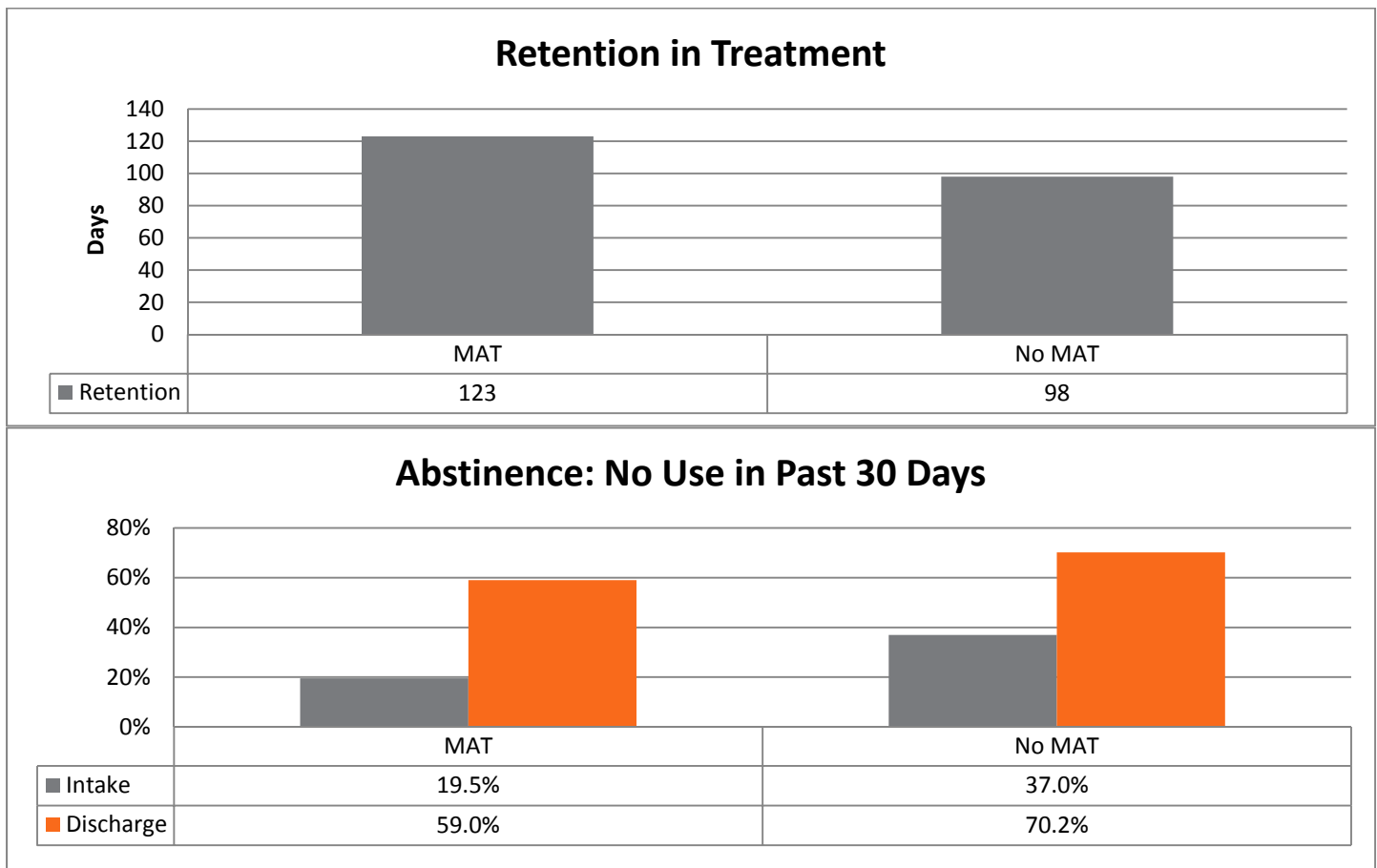


Data source: Matched records from DOC and DMH information systems for offenders released from prison in FY 2015.

Missouri Intervention and Treatment Programs for Substance Use Disorders

Medication Assisted Treatment

Medication Assisted Treatment (MAT) combines FDA-approved addiction medications with counseling. Addiction medications have been approved for the treatment of alcohol and opiate use disorders. Research shows that when treating substance use disorders, a combination of medication and behavioral therapies is most successful (SAMSHA, 2014). Missouri's data shows that consumers receiving MAT have better retention in treatment compared to those in traditional treatment. In addition those with MAT have comparable outcomes compared to those without MAT even though the MAT group tends to have greater problem severity (i.e. longer history of substance use, additional psychiatric issues, more recent substance use, unemployment, etc.)



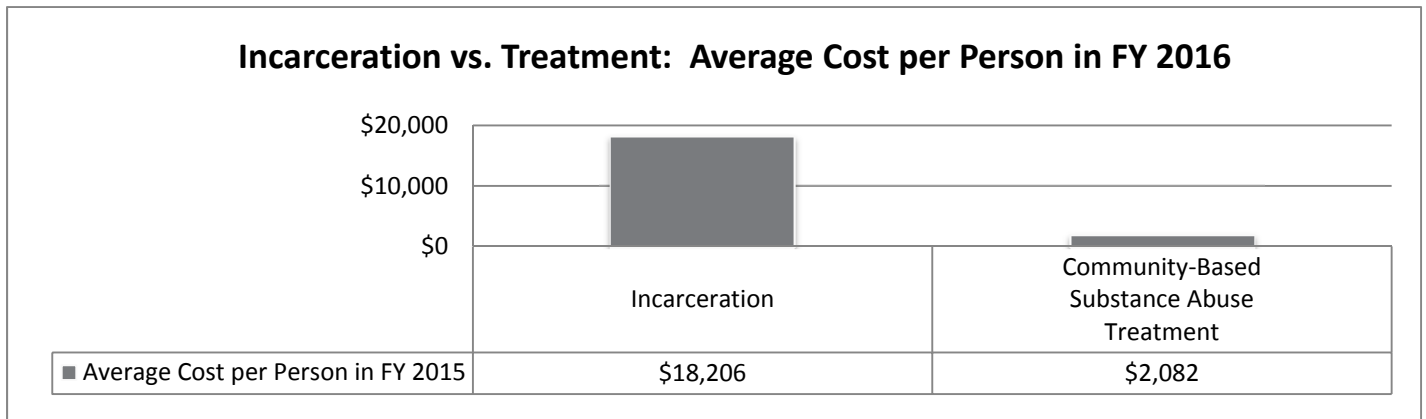
Data source: Treatment discharges in FY 2015.

DMH is collaborating with the Department of Corrections on a pilot study looking at the effectiveness of initiating the use of Vivitrol prior to release from the correctional facilities and continuing use in the community. Vivitrol blocks opiate receptors in the brain thereby eliminating the euphoric effects and preventing cravings for alcohol and opiate drugs such as heroin. It is administered in the form of a shot once per month. These individuals will receive follow-up medication and substance use counseling through DMH contracted community agencies. It is anticipated that these individuals will be less likely to relapse to alcohol or opiate use upon their release from prison, thereby reducing the likelihood of re-arrest and re-incarceration. The University of Missouri-St. Louis, Missouri Institute of Mental Health is conducting the evaluation of this project. Outcome data are collected on offenders for a period of two years after starting the program.

Missouri Intervention and Treatment Programs for Substance Use Disorders

Community-Based Treatment is Cheaper than Incarceration

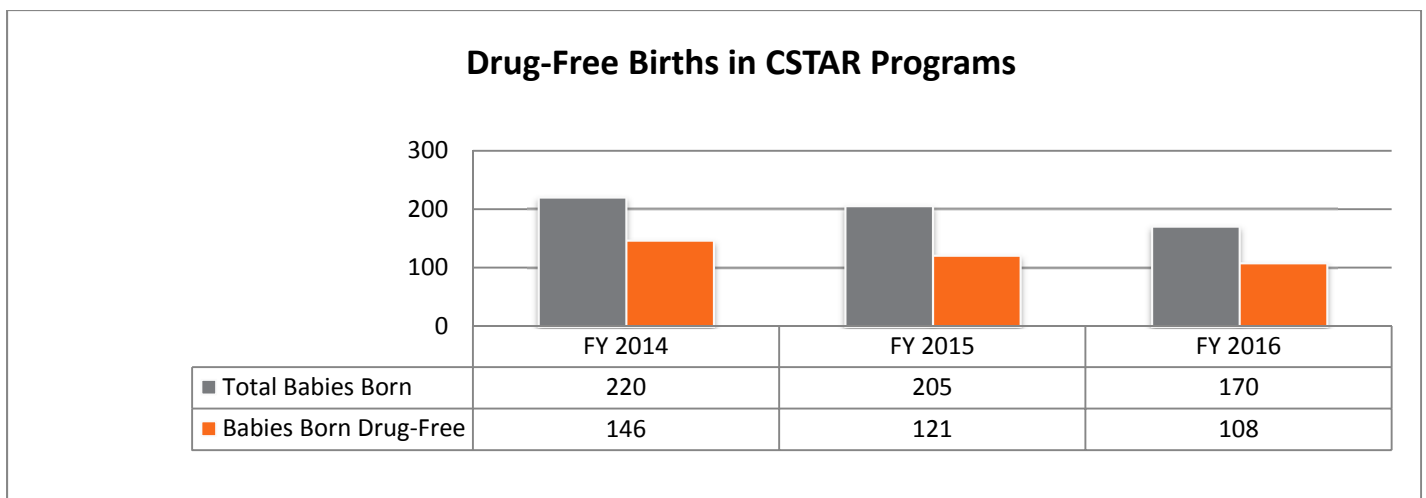
The potential cost savings from community-based substance use disorder treatment in lieu of incarceration has been recognized in several large-scale studies including the California Treatment Outcome Project and the National Treatment Improvement Evaluation Study (Ettner, S.L. & et al., 2006; SAMHSA, 1997). In Missouri, the average prison stay for an offender with a drug-related offense is 318 days at an average cost of \$57.25 per day - yielding an average cost per stay of \$18,206. The average length of engagement in community-based treatment is 79 days with an average cost of \$2,082. Intervention fees collected from offenders help pay a portion of the cost for community corrections and intervention services for offenders under community supervision.



Data source: DOC and DMH information systems.

Treatment for Pregnant Women Increases Likelihood of Healthy Babies

According to the National Household Survey on Drug Use and Health, approximately 7.9 percent of pregnant women have an alcohol addiction problem, and 3.7 percent of pregnant women have an illicit drug problem (SAMHSA, 2015b). Research has shown that pregnant women who need and receive substance use treatment are more likely to receive prenatal care; are more likely to reduce or abstain from alcohol, drugs, and tobacco use; and have better perinatal outcomes (Brady, T.M. & Ashley, O.S., 2005). Better outcomes are obtained for women who enter treatment early in their pregnancy. Lifetime cost of a child born with Fetal Alcohol Syndrome is estimated at \$2 million (SAMHSA, 2012).

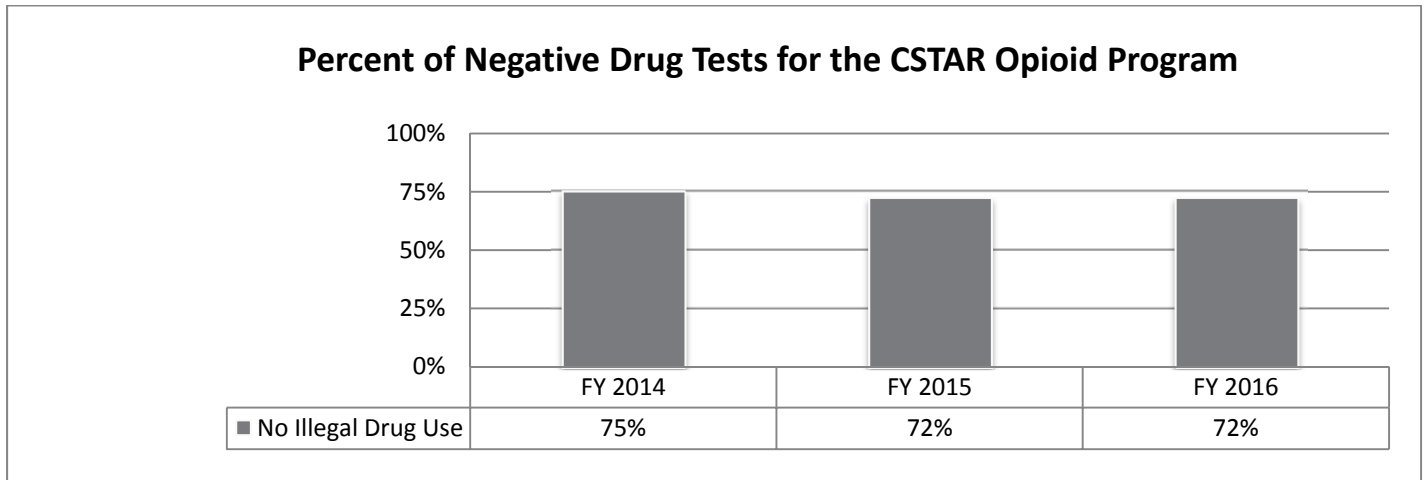


Data source: Treatment Episode Dataset, DMH information system.

Missouri Intervention and Treatment Programs for Substance Use Disorders

Drug Testing in the Opioid Programs

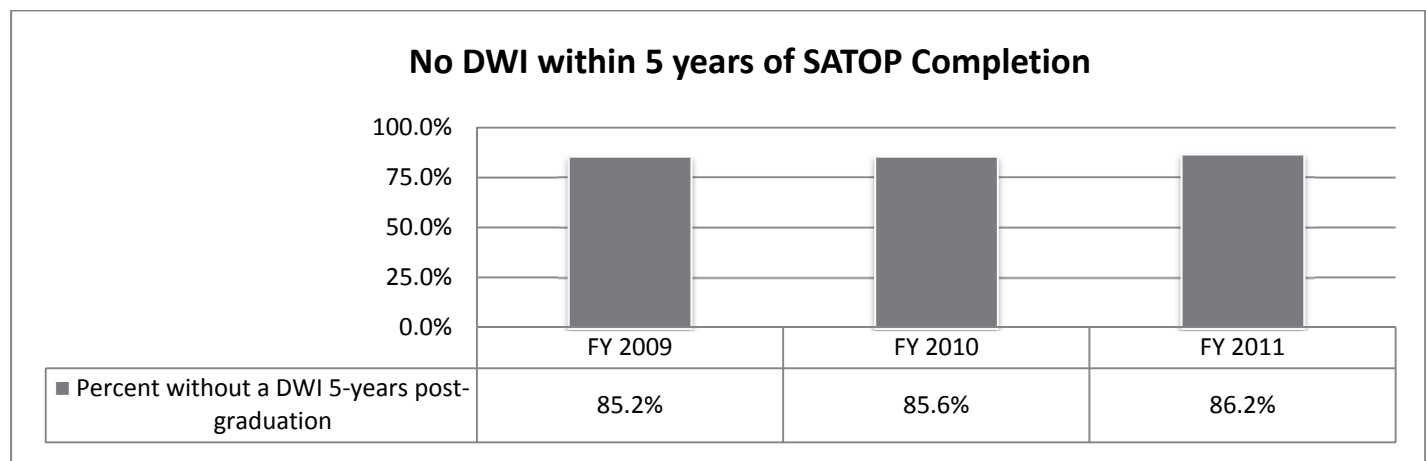
There is considerable research that shows that Opioid Treatment can reduce: illicit drug use, including injection drug use; risk of overdose; risky sexual behavior; transmission of infectious diseases (i.e. HIV, hepatitis B or C, bacterial infections); and criminal activity in addition to improving pregnancy outcomes (CDC, 2002). Most individuals in Missouri's Opioid Treatment programs do not test positive for illicit drugs when subjected to random drug tests.



Data source: Results of random drug tests collected from contracted agencies.

DWI Recidivism

In Missouri, completion of the Substance Abuse Traffic Offender Program (SATOP) is a required element of driver license reinstatement. Research has shown that combining alcohol treatment with either driver license restriction or suspension is associated with lower DWI recidivism rates compared to other interventions such as jail (DeYoung, D. J., 1997). Most individuals who complete SATOP do not receive an additional DWI five years post-graduation. Of those that graduated during FY 2010, 85.6 percent have not re-offended by FY 2015.



Data source: SATOP data, DMH information system.

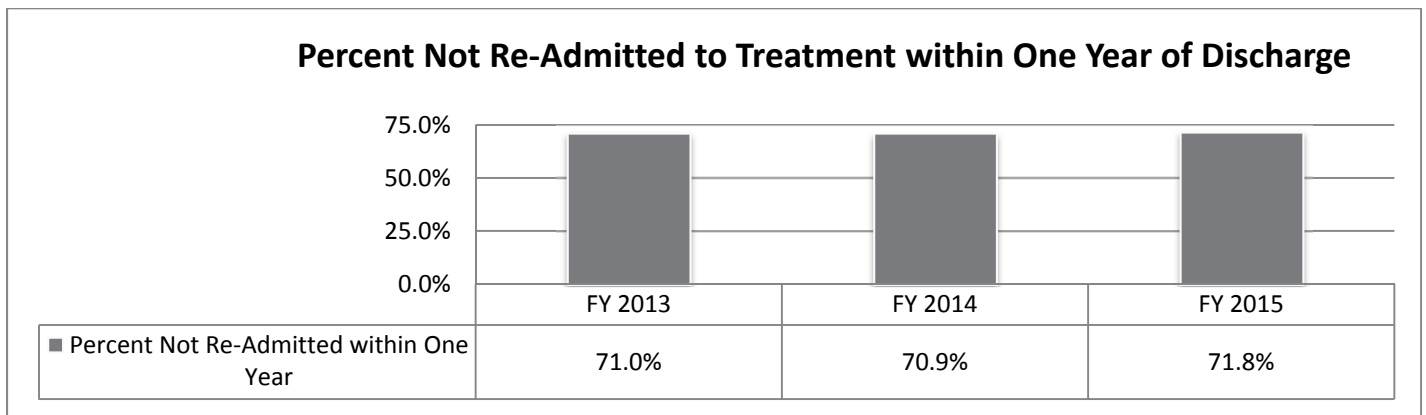
Recently, the SATOP program has added an intensive treatment component for chronic, repeat offenders participating in Drug/DWI Court. A Michigan study found that DWI Court with treatment significantly reduced re-arrest when compared to DWI offenders on traditional probation. One year re-arrest rates were 4.3 percent for DWI Court

Missouri Intervention and Treatment Programs for Substance Use Disorders

participants vs. 15.2 percent for offenders on traditional probation (NPC Research, 2008). In Missouri's Serious and Repeat Offender Program, 1.6 percent of the 1,495 FY 2015 graduates re-offended within a one year period. This is comparable to the results obtained in the Michigan Study.

Treatment Recidivism

While relapse is a common characteristic of the addiction process, most DMH consumers do not cycle in and out of substance use disorder treatment.

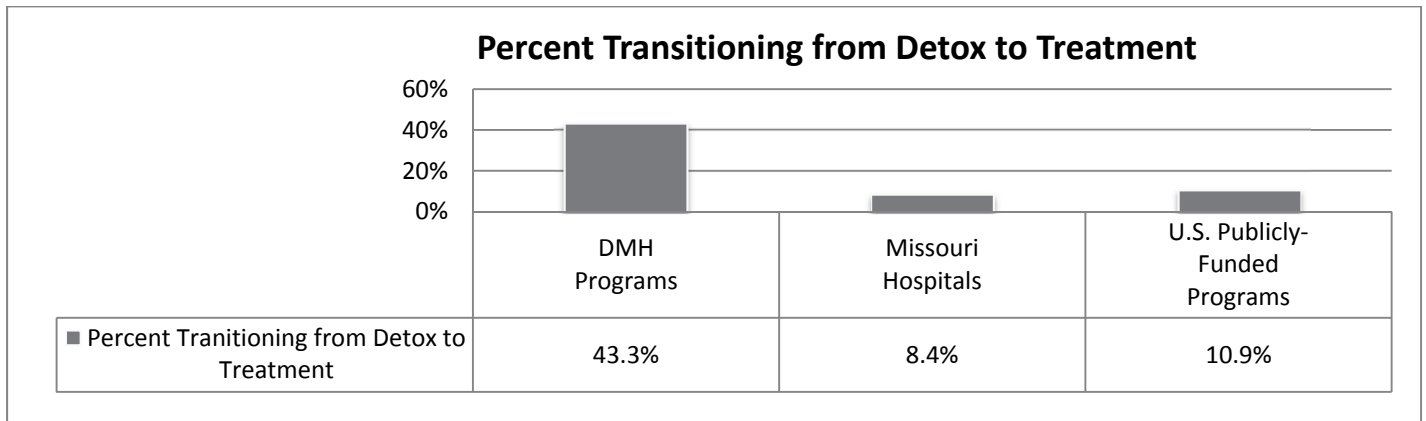


Data source: FY 2013-FY 2015 Treatment Discharges, DMH information system.

Transition from Detox to Treatment Increases Likelihood of Success

From SAMHSA's Detoxification and Substance Abuse Training Manual:

- *Detox patients are in a crisis.*
- *Research shows that detox is often followed by a reduction in drug use and a desire to seek treatment.*
- *Linkage from detox to treatment leads to an increase in recovery and a decrease in repeated detox and treatment services.*
- *Success at recovery depends on continuation of treatment after detox (SAMHSA, 2009).*



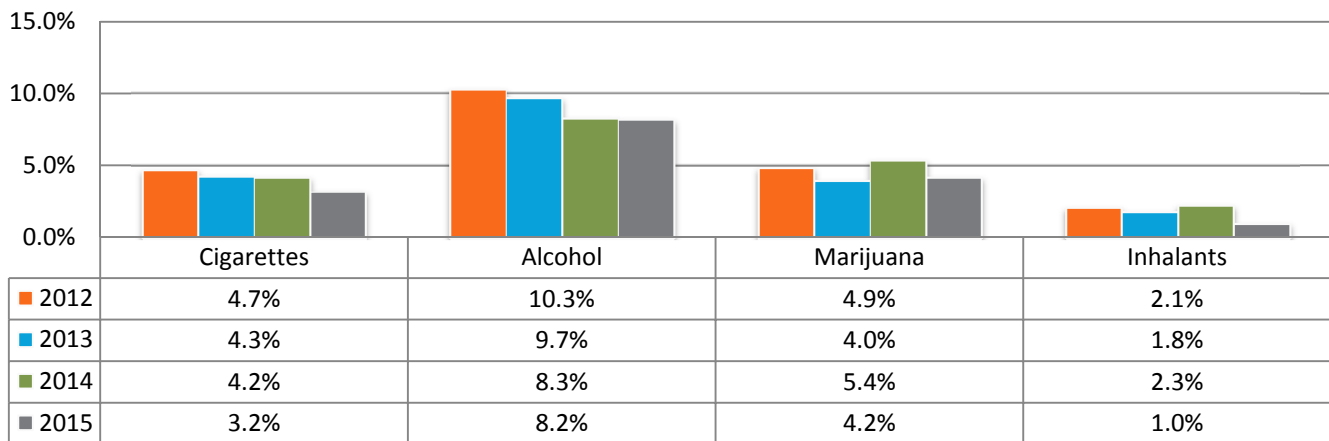
Data sources: DMH program data based on FY 2016 detox program closures; Missouri hospital data based on Medicaid patients served in FY 2016 who are admitted to substance use disorder treatment within 5 days of hospital discharge as determined from Medicaid claims.; U.S. publicly-funded program data from 2011 Treatment Episode Dataset (SAMHSA, 2014e)

Missouri Intervention and Treatment Programs for Substance Use Disorders

School-Based Intervention

Missouri's School-Based Prevention Program (SPIRIT Program) operates in four sites serving six school districts across the state. These districts serve large at-risk student populations based on standardized test scores, graduation rates, substance use prevalence, and juvenile justice referrals. SPIRIT's program goals are to: 1) delay onset and decrease use of alcohol, tobacco and other drugs; 2) improve overall school performance, and 3) reduce incidents of violence, including bullying. Over a four year period (2012-2015), SPIRIT has been trending downward in cigarette and alcohol use.

**Missouri's School-Based SPIRIT Program
to Reduce Recent Substance Use**



**Missouri's School-Based SPIRIT Program
Student Disciplinary Action in Past 3 Months**

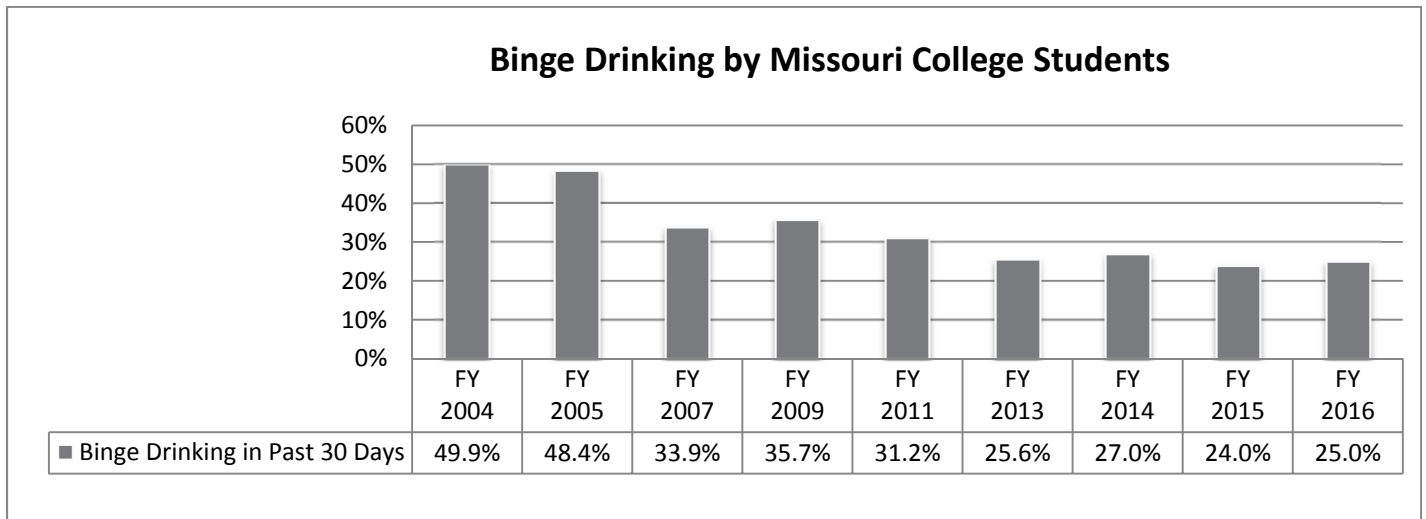


Data source: SPIRIT Evaluation (2015)

Missouri Intervention and Treatment Programs for Substance Use Disorders

Reducing Binge Drinking at Missouri Colleges

Binge drinking has been associated with unintentional and intentional injuries, alcohol poisoning, sexually transmitted diseases, unintended pregnancy, and children born with Fetal Alcohol Spectrum Disorders (CDC, 2012). Funded in part by DMH, Partners in Prevention is a statewide coalition of 21 public and private universities whose mission is to create an environment that supports good decision making in regards to alcohol by the college students who attend the higher education institutions in Missouri. In recent years, the prevalence of binge drinking among Missouri college students has declined.



Data source: Missouri College Health Behavior Survey, Partners in Prevention (PIP) Program

Missouri Intervention and Treatment Programs for Substance Use Disorders

References

- Brady, T.M. & Ashley, O.S. (2005). Women in substance abuse treatment: Results from the Alcohol and Drug Services Study (ADSS) (DHHS Publication No. SMA 04-3968, Analytic Series A-26). Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.
- Centers for Disease Control and Prevention (2002). Methadone Maintenance Treatment. Retrieved at: <http://www.cdc.gov/idu/facts/MethadoneFin.pdf>.
- Centers for Disease Control and Prevention (2012). Fact Sheet: Binge Drinking. Retrieved at: <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>.
- Deyoung, D.J. (1997). "An Evaluation of the Effectiveness of Alcohol Treatment, Driver License Actions and Jail Terms in Reducing Drunk Driving Recidivism in California." *Addiction* 92(8), 989-997.
- Ettner, S.L. & et al (2006). "Benefit-Cost in the California Treatment Outcome Project: Does Substance Abuse Treatment 'Pay for Itself'?" *Health Services Research* 41(1):192-213.
- King, K.M., Meehen, B.T., Trim, R.S., & Chassin, L. (2006). "Substance Use and Academic Outcomes: Synthesizing Findings and Future Directions." *Addiction* 101(12):1688-1689.
- Missouri Department of Corrections (2015). A Profile of the Institutional and Supervised Offender Population on June 30, 2014. Retrieved at: <http://doc.mo.gov/Documents/publications/Offender%20Profile%20FY15.pdf>.
- Missouri Department of Public Safety (2016). Veterans Service Program [website]. Retrieved at: <http://www.mvc.dps.mo.gov/service/>.
- Missouri Department of Health & Senior Services (2016). Pregnancy MICA [website]. Retrieved at: <http://health.mo.gov/data/mica/PregnancyMICA/index.html>.
- National Institute on Drug Abuse (2012). Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research-Based Guide. Retrieved at: http://www.drugabuse.gov/sites/default/files/podat_cj_2012.pdf.
- NPC Research (2008). Michigan DUI Courts Outcome Evaluation: Final Report. Retrieved at: http://www.npcresearch.com/Files/MI_DUI_Outcome_Evaluation_FINAL_REPORT_Release_March_2008.pdf.
- Substance Abuse and Mental Health Services Administration (1997) *National Treatment Improvement Evaluation Study 1997 Highlights*.
- Substance Abuse and Mental Health Services Administration (2001) Youth Violence Linked to Substance Use. The NHSDA Report. Retrieved at: <http://www.samhsa.gov/data/2k1/YouthViol/YouthViol.htm>.
- Substance Abuse and Mental Health Services Administration (2009). Detoxification and Substance Abuse Treatment Training Manual: Based on A Treatment Improvement Protocol TIP 45. Retrieved at: http://www.kap.samhsa.gov/products/trainingcurriculums/pdfs/tip45_curriculum.pdf.

Missouri Intervention and Treatment Programs for Substance Use Disorders

- Substance Abuse and Mental Health Services Administration (2012). The Financial Impact of Fetal Alcohol Syndrome [website]. Accessed on January 12, 2013 at: <http://fasdcenter.samhsa.gov/publications/cost.aspx>.
- Substance Abuse and Mental Health Services Administration (2014). Treatment Episode Data Set, Discharges, 2011 [dataset]. ICPSR35074-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2014-05-12. Doi:10.3886/ICPSR35074.v1.
- Substance Abuse and Mental Health Services Administration (2015a). 2012-2013 NSDUH State Estimates of Substance Use and Mental Disorders. Retrieved at:
<http://www.samhsa.gov/data/sites/default/files/NSDUHsaeSpecificStates2013/NSDUHsaeMissouri2013.pdf>.
- Substance Abuse and Mental Health Services Administration (2015b). National Survey on Drug Use and Health, 2013 [dataset]. ICPSR35509-v3. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2015-11-23. <http://doi.org/10.3886/ICPSR35509.v3>.